



**Andrew Young**

# TRANSPORTATION SITE IMPACT HANDBOOK



ESTIMATING THE TRANSPORTATION IMPACTS OF GROWTH

## 2014 Edition

1



### Your Panelists



**Gary Sokolow**  
(FDOT)



**Andrew Young**  
(FDOT)



**Jeannine Fier**  
(CDM Smith)



**Martin Guttenplan**  
(CDM Smith)



2





## Today's Meeting

### TRANSPORTATION SITE IMPACT HANDBOOK

Estimating the Transportation Impacts of Growth



What's New



A Look at the  
Handbook

Future  
Training

3



## Common Questions

- You will get a copy of the presentation in a day or two
- 1.5 CM Credits (#30194)
- 1.5 PDH Credits
- There will be a recording (no credit however)

4





## Webinar Intro

 **MUTED**



All Participants are muted



Ask question via Question Tab at any time

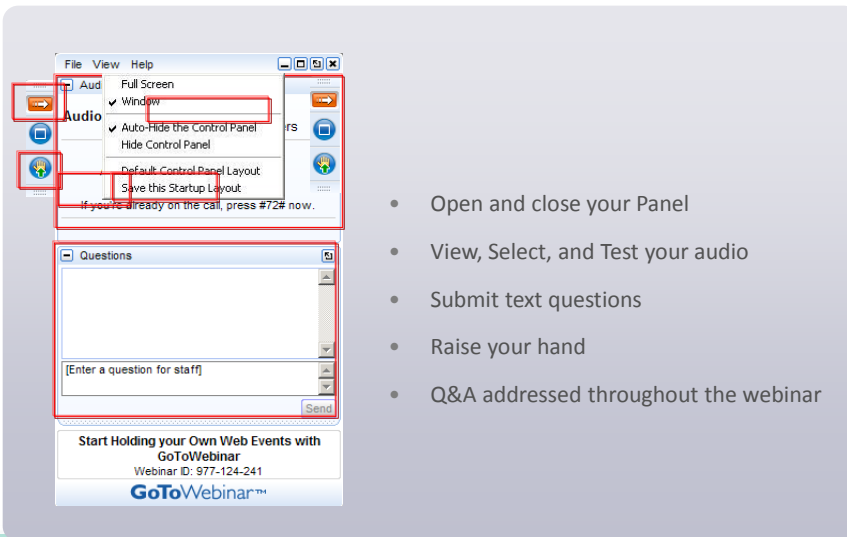


Question & Answer Session during the presentation

5



## How to Participate Today



- Open and close your Panel
- View, Select, and Test your audio
- Submit text questions
- Raise your hand
- Q&A addressed throughout the webinar

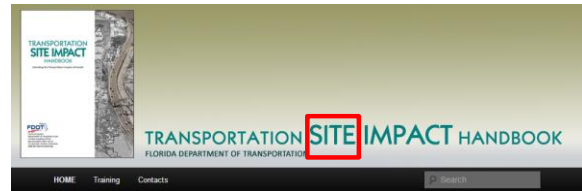
6







**Gary Sokolow**

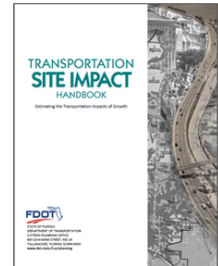


We've renamed the document to Transportation **Site Impact** Handbook to help differentiate between other traffic analysis guides.

[TSIH\\_April\\_201404.pdf](#)

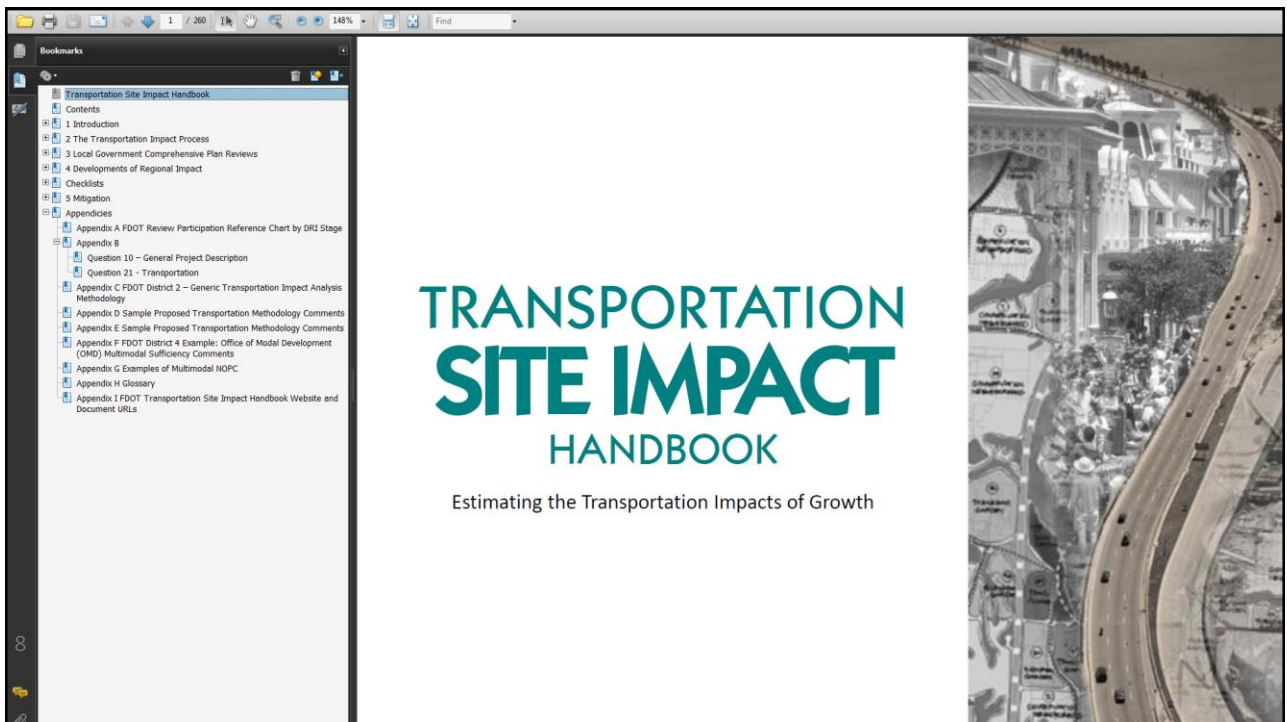
The Florida Department of Transportation (FDOT) has developed these guidelines to assist FDOT staff in their review of developments. While this handbook is primarily for FDOT staff, it is available to local governments and other transportation partners in an effort to communicate the FDOT's guidance for reviewing various documents.

The purpose of this document is to guide the professional through the current generally accepted professional practice. This should assist in making better decisions for the study of the transportation impacts of new developments.



7 <http://fdottransportationimpacthandbook.com/>

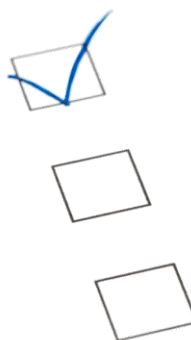
OPEN HANDBOOK CURRENT VERSION April 4, 2014





# Poll

WHAT BEST DESCRIBES YOUR WORKPLACE?



9



## Statutory and Regulatory Authority

FDOT is responsible for certain reviews as they relate to transportation impact on state transportation facilities:

Local government plans

Developments of Regional Impact (DRI)

Within the confines of today's statutes – which have changed since 2010



10

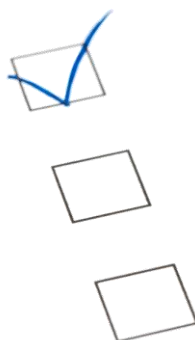


Page |

9



# Poll



HAVE YOU EVER USED THE 2010  
VERSION OF THE SITE IMPACT  
HANDBOOK?

11



## Why Transportation Impact Analysis?



Protecting the integrity  
and safety of the  
transportation system



Minimize bad impacts  
of both regional and  
local transportation  
networks

12



Page |

17



## Why this Handbook?



Guide the FDOT in reviewing LGCPs, DRIs and certain other land use changes



Offer guidance to transportation partners

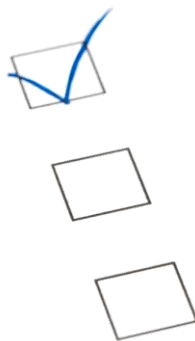
13



Page |

17

## Poll




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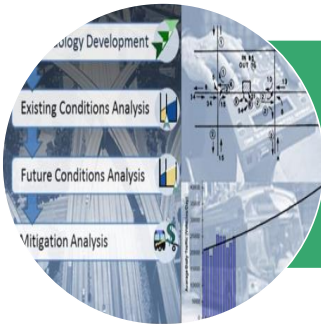
DO YOU HAVE A COPY OF THE 2014  
HANDBOOK HANDY?

14





## What is Covered Today?



# Overview of all chapters and what is new



15



## How the Handbook is Organized



CHAPTER 1 – Introduction



CHAPTER 2 – Transportation Impact Process



CHAPTER 3 – Local Government Comprehensive Plans Review



CHAPTER 4 – Development of Regional Impact



CHAPTER 5 – Mitigation

16





## Resource Guide

18



### 3.10 Resource Guide. Legal Authority for Department Review

Florida Statutes, Online Sunshine:

<http://www.leg.state.fl.us/Welcome/index.cfm?CFID=229891382&CFTOKEN=88136963>

WEB

Florida Statutes

WEB

Florida  
Administrative  
Code

Florida Administrative Code: <https://www.flrules.org/>

*The following Florida Statutes and Rule 73C-40, Florida Administrative Code, provide the authority that guides the review of local government comprehensive plans and Developments of Regional Impact documents:*

#### 3.10.1 Florida Statutes (F.S.)

##### Future Land Use and Transportation Elements:

Sections 163.3177(6)(a) and (b), F.S., set forth the requirements for the local government comprehensive plan Future Land Use and Transportation Elements.

##### Concurrency:

Section 163.3180, F.S., addresses concurrency and states that transportation

## Checklists

19



### DRI Checklist 1 | Methodology Meeting

1 of 3

Project	Reviewer	Date of Review: Comments Due:	
<b>Project Information</b>			Y N N/A
A. Site relative to the surrounding roadway network shown?	1. In map format?		<input type="radio"/> <input type="radio"/> <input type="radio"/>
B. Project phasing shown?	1. Single phase project?		<input type="radio"/> <input type="radio"/> <input type="radio"/>
	2. Multiple phases?		<input type="radio"/> <input type="radio"/> <input type="radio"/>
C. Proposed buildout year(s) of project phase(s) identified?			<input type="radio"/> <input type="radio"/> <input type="radio"/>
D. Development defined in acceptable manner for each phase of implementation?	1. Number dwelling units (DUs) for residential land uses?		<input type="radio"/> <input type="radio"/> <input type="radio"/>
	2. Square feet (SF or GLSF) for commercial, office, retail, industrial land uses?		<input type="radio"/> <input type="radio"/> <input type="radio"/>
E. Acceptable study area limits identified?	1. Critical roadway segments identified?		<input type="radio"/> <input type="radio"/> <input type="radio"/>
	2. Critical intersections identified?		<input type="radio"/> <input type="radio"/> <input type="radio"/>
<b>Data Collection and Existing Conditions</b>			
A. Stated how data on existing conditions will be collected?	2. Acceptable locations and durations for traffic data collection identified?		<input type="radio"/> <input type="radio"/> <input type="radio"/>
	a. 3 consecutive days for 24-hr counts in urban areas?		<input type="radio"/> <input type="radio"/> <input type="radio"/>
	b. Five consecutive days in rural areas?		<input type="radio"/> <input type="radio"/> <input type="radio"/>
	3. Measures identified for collecting transit, bicycle and pedestrian volumes and facilities info?		<input type="radio"/> <input type="radio"/> <input type="radio"/>



## Appendix Materials

**Appendices:** The Appendices include:

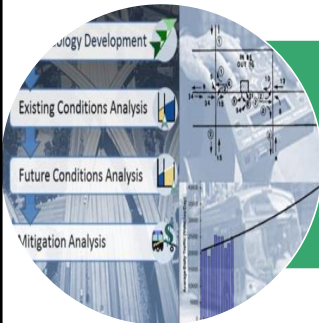
- [Appendix A](#) DRI Stages of Review
- [Appendix B](#) Questions 10 (General Project Description) and 21 (Transportation)
- [Appendix C](#) Sample Transportation Impact Methodology (District 2)
- [Appendix D](#) Samples Proposed Transportation Methodology Comments
- [Appendix E](#) Sample Proposed Transportation Methodology Comments
- [Appendix F](#) District 4 Example
- [Appendix G](#) Examples of Multimodal Notice of Proposed Change
- [Appendix H](#) Glossary
- [Appendix I](#) Document URLs

20



Page | 13

## Chapter 2



# Chapter 2 – Transportation Impact Process

Technical guidelines for reviewing transportation impact studies

21



CHAPTER 2 – Transportation Impact Process

Page | 17



## Chapter 2 – What's New?

### Chapter 2 The Transportation Impact Process



Still the largest  
chapter

Much of it is  
the same  
guidance

23



CHAPTER 2 – Transportation Impact Process

## Chapter 2 – What's New?

### More multimodal

- Moved away from all the steps being based on the “4-step” process



### Recognizes new sources and info

- Trip Generation Manual
- Trip Internalization
- Highway Capacity Manual 2010
- FDOT's 2013 Quality/Level of Service tables and software
- Practical guidance from new sources
- Standard “K” factor

24



CHAPTER 2 – Transportation Impact Process



## More Multi-Modal Guidance

25

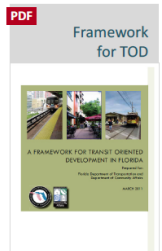
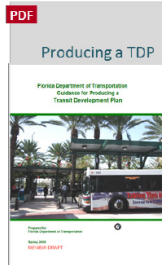


CHAPTER 2 – Transportation Impact Process

Page |

32

### Data Considerations for Future Transit Service



When considering potential transit services, the density, diversity, and distance factors associated with a proposed development should all be considered. Specifically, transit needs should be assessed in the context of the types of housing, mixture of land uses, density and intensity of development, as well as walking distance to transit stops.

As the need for transit services is reviewed, the focus of the analysis should extend outward from development projects and activity nodes to consider the potential for modifying existing transit service.

The study area should not be restricted in terms of walking distance; rather the reviewer should consider, in consultation with the transit provider, whether it is desirable to extend service a modest distance to serve new development.

The transit development plan (TDP) may be reviewed and the transit agency serving the area should be contacted to determine the current and committed service in the area.

Additional transit-related tools and resources are available to assist reviewers, including *Guidance for Producing a Transit Development Plan*, and *A Framework for Transit Oriented Development in Florida*.

## More Multi-Modal Guidance

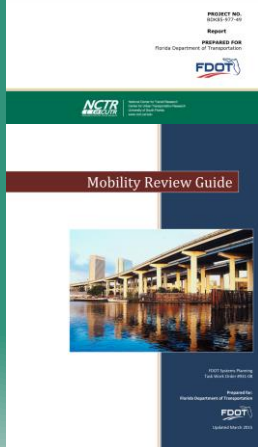
26



CHAPTER 2 – Transportation Impact Process

## Review and Best Practices for Mobility and Corridor Management Plans

Multimodal Transportation Best Practices and Model Element



- Guidance for developing a multimodal transportation element
- How multimodal planning differs from the conventional planning process
- Definition of mobility and accessibility from a multimodal perspective
- Methods to measure benefit of corridor management and multimodal strategies for mobility on SHS
- Effective corridor management and multimodal transportation planning to support FDOT CPA review and technical assistance efforts



## Q/LOS Handbook 2013 & HCM 2010

29



CHAPTER 2 – Transportation Impact Process

Page | 37

PDF

### QLOS Handbook



LOS determinations should be based on methodologies consistent with the latest [Highway Capacity Manual](#), the latest [FDOT Quality/Level of Service Handbook](#) or a methodology determined by FDOT as being comparable.

For existing conditions, Level of Service analysis should be performed along each segment of the roadway system identified in the methodology component within the area of influence. These facilities will include the major roadways and intersections within the study area.

Critical intersections for analysis may be identified based on the importance of the roadways or the volume of development traffic using the intersection. Although arterial facility LOS is stressed in highway LOS standards, detailed analyses at selected intersections may be necessary to evaluate specific movements. Both facility LOS and intersection analysis are appropriate to determine impacts from proposed developments.

The procedures in the latest version of the [FDOT Quality/Level of Service Handbook](#) may be sufficient to perform existing condition analyses at the facility level.

## Standard “K” Factor

30



CHAPTER 2 – Transportation Impact Process

Page | 29

### Exhibit 7 Standard K Factors

Area (Population) [Examples]	Facility Type	Standard K Factors (%AADT)
Large Urbanized Areas with Core Freeways (1,000,000+) [Jacksonville, Miami]	Freeways	8.0-9.0
	Arterials	9.0
Other Urbanized Areas (50,000+) [Tallahassee, Ft. Myers]	Freeways	9.0
	Arterials	9.0
Transitioning to Urbanized Areas (Uncertain) [Fringe Development Area]	Freeways	9.0
	Arterials	9.0
Urban (5,000-50,000) [Lake City, Key West]	Freeways	10.5
	Arterials	9.0
Rural (5,000) [Chipley, Everglades]	Freeways	10.5
	Highways	9.5
	Arterials	9.5

WEB

FDOT  
Standard K Factor

Please go to the FDOT Website on this issue at:

[www.dot.state.fl.us/planning/systems/programs/sm/transition/information/default.shtm](http://www.dot.state.fl.us/planning/systems/programs/sm/transition/information/default.shtm)  
bit.ly/1gq5dpP



## More Practical Advice

31



### Top 9 Things to Review with a Field Visit

*The aerals are not always right*

#### Field Review of Physical Features

*There are a lot of important details you can't always see on an aerial.*

*Why do you need to go out in the field when everything is right there on the aerial? First, because the aerals aren't always right.*

The aerals may not be up to date. You may need to adjust your data collection to account for reality. If a traffic study is based on an obsolete road network it would have zero credibility.

The second reason to go out to the site is that there are a lot of important details you can't always see on an aerial. In addition to verifying the information on your hand sketches is correct, add the following details to them while you are in the field:

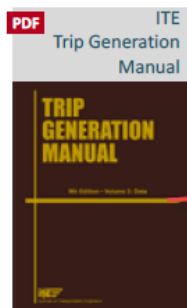
- Transit Stops
- Traffic Signal Operations (Protected Left Turn Phasing, Protected/Permitted Left Turn Phasing, etc.).
- No Turn on Red Restrictions
- Parking Restrictions

## Trip Generation

34



### 2.4.3 Trip Types



After the number of trips has been estimated, the type of trips should also be addressed. The *Trip Generation Manual 9<sup>th</sup> Edition* defines three basic types of trips generated by a development: primary, pass-by and diverted. Exhibit 11 illustrates the types of trips from the ITE *Trip Generation Manual, 9th Edition* illustrates the trip types.

Takes you to the ITE "Store"



**Trip Generation Characteristics of Discount/Home Improvement Superstores, Major Distribution Centers, and Small Box Stores**

Prepared for:  
Florida Department of Transportation  
Systems Planning Office  
February 2, 2011

**Trip Generation**  
Characteristics of Large Gas Stations/Convenience Stores and Student Apartments

**Trip Generation Recommendations Report**

October 2004  
Prepared for: Florida Department of Transportation, Systems Planning Office  
Prepared by: Kimberly Hays

## FDOT Trip Generation Studies

CHAPTER 2 – Transportation Impact Process

Page | 49

## Growth Rates

*Growth is not always a given*

Exhibit 19  
Nov. 2012 Traffic Volume Trends

**WEB** FHWA  
Travel Monitoring  
Federal Highway Administration  
Office of Highway Policy Information  
Travel Monitoring

Year	Vehicle-Distance Traveled (Billion Miles)
1967	1,800
1970	1,900
1980	2,100
1990	2,300
2000	2,600
2007	2,950
2012	3,050

CHAPTER 2 – Transportation Impact Process

Page | 65



## Growth Rates



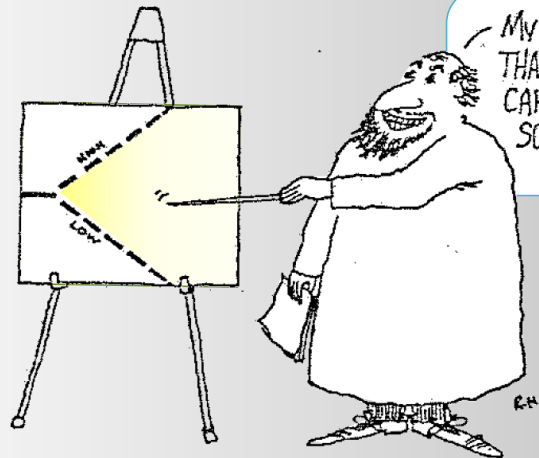
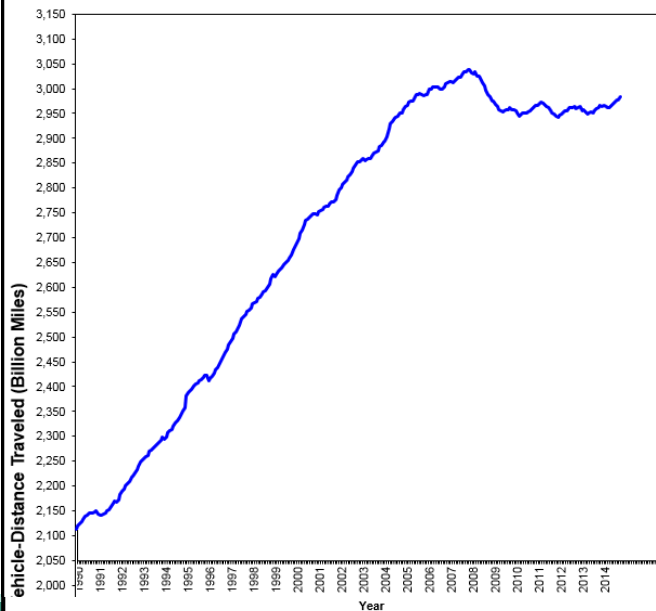
September  
2014

44



CHAPTER 2 – Transportation Impact Process

Figure 1 - Moving 12-Month Total on ALL Roads



45



CHAPTER 2 – Transportation Impact Process



## NCHRP Research on Internal Capture

46



CHAPTER 2 – Transportation Impact Process

Page |

## NCHRP REPORT 684

NATIONAL  
COOPERATIVE  
HIGHWAY  
RESEARCH  
PROGRAM

### Enhancing Internal Trip Capture Estimation for Mixed-Use Developments

TRANSPORTATION RESEARCH BOARD  
OF THE NATIONAL ACADEMIES

## CUTR Added to the dataset

47



CHAPTER 2 – Transportation Impact Process

Page |

50



A. Restaurant



B. Retail



C. Residential

Figure 4-3: Restaurant, Retail, and Residential Areas at Creekwood

[http://www.dot.state.fl.us/research-center/Completed\\_Proj/Summary\\_PL/FDOT-BDK84-977-10-rpt.pdf](http://www.dot.state.fl.us/research-center/Completed_Proj/Summary_PL/FDOT-BDK84-977-10-rpt.pdf)



# Questions?

49



**Jeannine Fier**

## Chapter 3 Comprehensive Planning

### Local Government Comprehensive Plan Reviews

Resource Guide

Review of FLUM  
Amendments

Elements

Review of Text  
Amendments

Transportation  
Concurrency-Related  
Amendments

Other Local Government  
Comprehensive Plan  
Review

Local Government Comp  
Plan Reviews

50



CHAPTER 3 – Comprehensive Planning



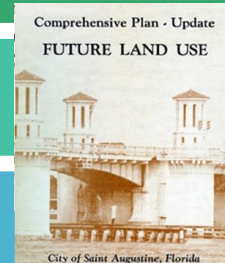
## Chapter 3 Local Government Comp Review

Comprehensive Plans and Plan Amendments

Future Land Use Map (FLUM) Amendments

Text Amendments

Transportation Element



52



CHAPTER 3 – Comprehensive Planning

## Changes Since 2010 Update

House Bill 7207



Community Planning Act

House Bill 319



Concurrency

Rules 9J-5, 9J-11, and  
14-94, Florida  
Administrative Code



54



CHAPTER 3 – Comprehensive Planning

Page |

87

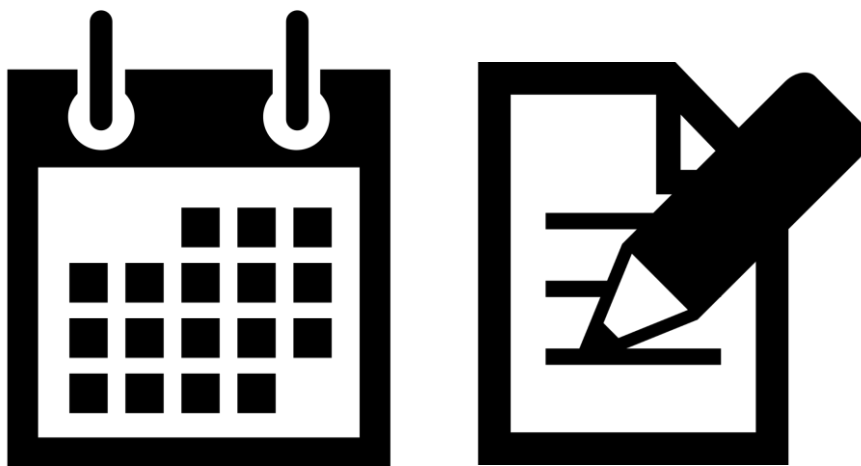


## HB 7207: What is Eliminated

- ▶ State concurrency requirement for transportation, schools and parks and recreation facilities – optional for local governments
- ▶ Financial feasibility for capital improvement plans – back to pre-2005 status
- ▶ State Comprehensive Plan from compliance determination
- ▶ Energy efficiency/greenhouse gas reduction provisions (HB 697)



## Evaluation and Appraisal Process



New scheduling and documentation



# FDOT Procedure on Review of Comprehensive Plans

Approved



Department of Transportation

Effective: November 14, 2012

Office: Policy Planning

Topic No.: 525-010-101-d

## REVIEW OF LOCAL GOVERNMENT COMPREHENSIVE PLANS

### PURPOSE:

The purpose of this procedure is to provide guidance for Florida Department of Transportation (Department) review of local government comprehensive plans (comprehensive plans or plans) and plan amendments adopted pursuant to **Chapter 163, Part II, Florida Statutes (F.S.)**. The procedure reflects significant changes passed by the legislature in the **Community Planning Act** (Act) codified in **Chapter 2011-139, Laws of Florida**. The Act limits the scope of state and regional agency comments to important state and regionally significant resources and facilities that may be adversely impacted by a comprehensive plan amendment if adopted. Department



58



CHAPTER 3 – Comprehensive Planning

Page |

88

## House Bill 7207 (2011)

# “Community Planning Act”

Changes to state review methods	Repeal of statutory provisions for the designation of TCEAs, TCMAs, and MMTDs	Redefined roles of SLPA and reviewing agencies	Revisions to Sector Plan and Rural Land Stewardship Area Programs
---------------------------------	---	--	---

60



CHAPTER 3 – Comprehensive Planning



## Important Name Change

- State Land Planning Agency (SLPA)
- Department of Community Affairs

To

- Department of Economic Opportunity (DEO)
  - Changed all web links



61

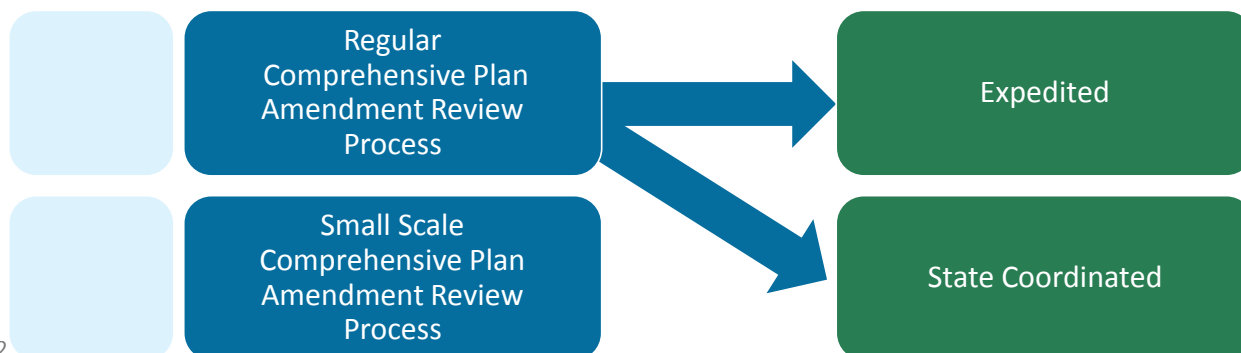


CHAPTER 3 – Comprehensive Planning

## House Bill 7207 (2011)

### Comprehensive Plan State Review

### “Community Planning Act”



62

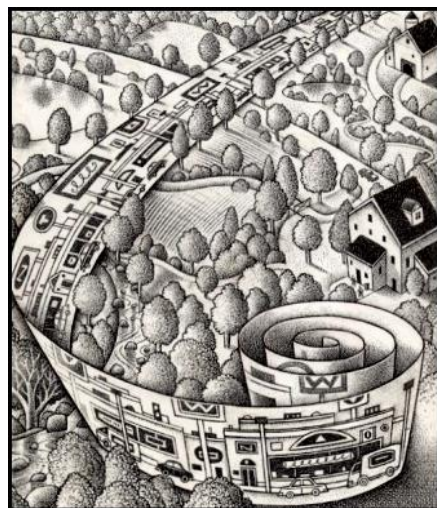


CHAPTER 3 – Comprehensive Planning



## Concurrency is no longer mandatory

Even though optional, most local governments throughout the state still implement transportation concurrency and have not submitted amendments to rescind.



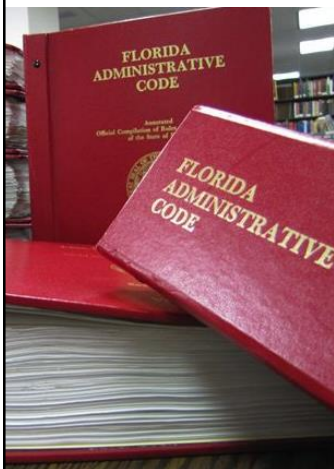
63



CHAPTER 3 – Comprehensive Planning

Source: plannersweb.com

## Statewide LOS Standards are now advisory



### Rules 9J-5 and 9J-11, F.A.C.

- Repealed in 2011 with portions incorporated into Ch. 163, Part II, F.S.

### Rule 14-94, F.A.C.

- Repealed in 2012
- Impacted statewide minimum level of service standards

64



CHAPTER 3 – Comprehensive Planning



## State agency review

- What is an important state facility?



65



CHAPTER 3 – Comprehensive Planning

## Concurrency Alternatives - Changes

TCEA Transportation Concurrency Exception Areas

TCMA Transportation Concurrency Management Areas

MMTD Multimodal Transportation Districts

LCTMS Long-Term Concurrency Management Systems

68



CHAPTER 3 – Comprehensive Planning



## Sector Plan and Rural Land Stewardship Program



### Sector Plan Program

#### Revisions

- Changes to designation criteria, development, and agency roles

69



CHAPTER 3 – Comprehensive Planning



### Rural Land Stewardship Area Program

#### Revisions

- Initiation process, designation, plan amendment process, and state agency coordination and review

## Sector Plan and RLSA Programs



### Rural Land Stewardship Area Program

- Revisions to initiation process, designation, plan amendment process, and state agency coordination and review
- Agreement not required with DEO

71



CHAPTER 3 – Comprehensive Planning



## Sector Plan and RLSA Programs



Sector Plan Program

15,000 acres

“Regular”



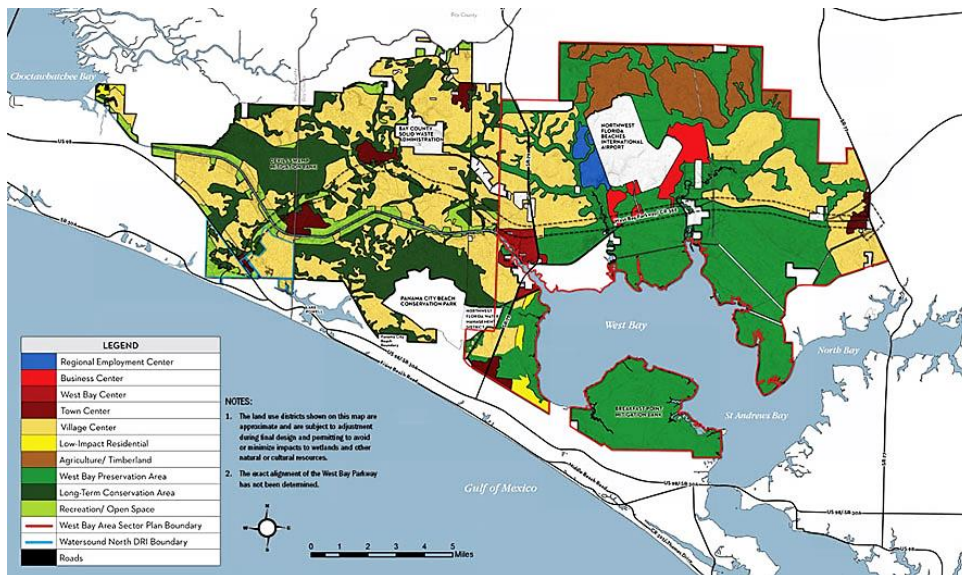
FLUM Conversion through agreement with DEO

72



CHAPTER 3 – Comprehensive Planning

## Bay-Walton Sector Plan



73





## Sector Plan Components and Review

### Long-Term Master Plan (LTMP)

- Overarching Framework
- State Coordinated Review

### Detailed Specific Area Plan (DSAP)

- Implements LTMP
- 1,000 acres
- Adoption by local development order

74



CHAPTER 3 – Comprehensive Planning

## LGCP Resource Guides



Legal Authority for Department Review



FDOT Online Resources



DEO Online Resources



LGCP FLUM Amendment Review Checklist

75



CHAPTER 3 – Comprehensive Planning



## LGCP FLUM Amendment Review Checklist

LGCP Amendment Review Checklist   Evaluation Criteria		Y	N	N/A
A. Study area boundaries established to include all significantly impacted SHS segments under proposed FLUM amendment land use scenario, including those located outside the jurisdiction of entity pursuing amendments?		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1. All SIS segments identified?		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. Transportation impacts for existing FLUM adequately defined for comparison use in review?		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1. Land use scenario defined for existing FLUM category which has mix, densities and intensities of primary and secondary permitted land uses?		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
a. Assumptions fully documented?		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Trip-generating characteristics of the existing FLUM Land Use Scenario shown?		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Professionally acceptable method employed to determine distribution of trips for existing FLUM Land Use Scenarios?		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

77



CHAPTER 3 – Comprehensive Planning

# Questions?

81



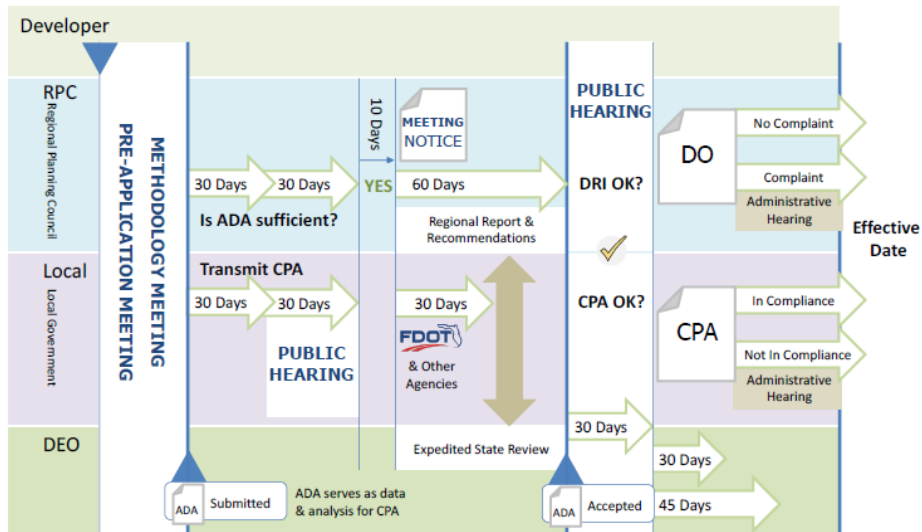


## Chapter 4

## Developments of Regional Impact



Martin Guttenplan



79

**DRI** CHAPTER 4 – Developments of Regional Impact

## DRI Defined



Any development which, because of its character, magnitude or location, would have a substantial effect on the health, safety or welfare of citizens in more than one county.\*

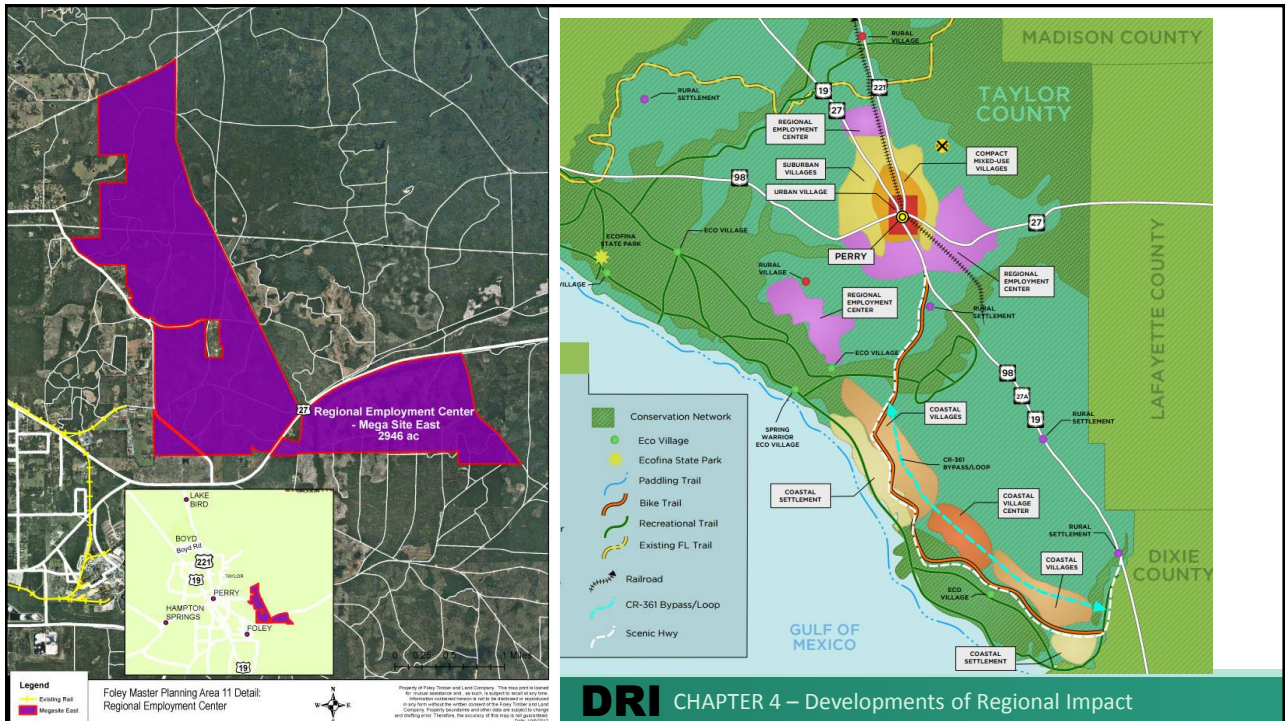
\*Exceptions and conditions apply

80

*Section 380.06(1), Florida Statutes (F.S.)*

**DRI** CHAPTER 4 – Developments of Regional Impact





## Changes since 2010 update



Inclusion of new exemptions and revisions to thresholds, substantial deviation, and essentially built-out criteria and extensions

Revisions to regulations governing DULAs



# Dense Urban Land Areas



## DRI Review Exemptions for:

DULA municipality

Urban service areas of a DULA county

DULA counties without urban service areas

## List of Local Governments Qualifying as Dense Urban Land Areas

83



**DRI** CHAPTER 4 – Developments of Regional Impact

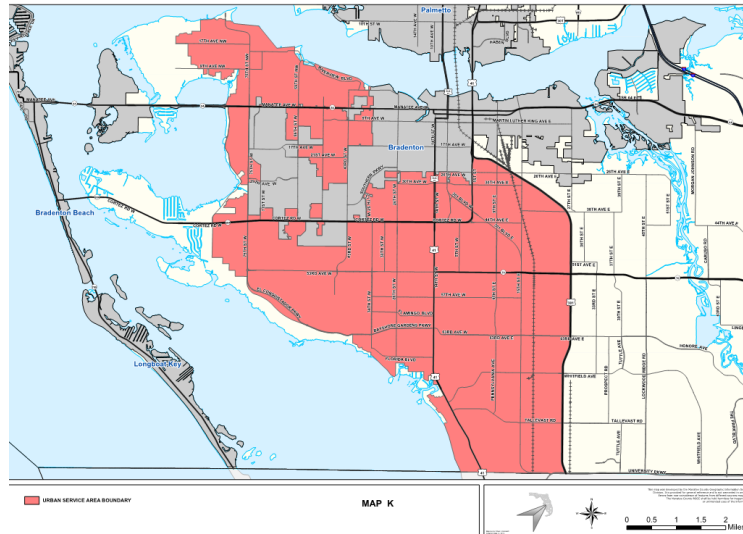
Section 380.06(29), F.S.

<ul style="list-style-type: none"> <li>• Bar Harbor</li> <li>• Baldwin<sup>1</sup></li> <li>• Bay Harbor Islands<sup>1</sup></li> <li>• Bay Lake<sup>1</sup></li> <li>• Belle Glade<sup>1</sup></li> <li>• Belle Isle<sup>1</sup></li> <li>• Belleair Beach<sup>1</sup></li> <li>• Belleair Bluffs<sup>1</sup></li> <li>• Belleair Shore<sup>1</sup></li> <li>• Belleair<sup>1</sup></li> <li>• Biscayne Park<sup>1</sup></li> <li>• Boca Raton<sup>1</sup></li> <li>• Bonita Springs</li> <li>• Boynton Beach<sup>1</sup></li> <li>• Bradenton</li> <li>• Briny Breezes<sup>1</sup></li> <li>• Cape Coral</li> <li>• Casselberry<sup>1</sup></li> <li>• Clearwater<sup>1</sup></li> <li>• Clermont</li> <li>• Clewiston</li> <li>• Cloud Lake<sup>1</sup></li> <li>• Cocoa</li> <li>• Cocoa Beach</li> <li>• Coconut Creek<sup>1</sup></li> <li>• Cooper City<sup>1</sup></li> <li>• Coral Gables<sup>1</sup></li> <li>• Coral Springs<sup>1</sup></li> <li>• Crestview</li> <li>• Cutler Bay<sup>1</sup></li> <li>• Dade City</li> <li>• Dania Beach<sup>1</sup></li> <li>• Davie<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Mangonia Park<sup>1</sup></li> <li>• Marathon (2010)<sup>2</sup></li> <li>• Marco Island</li> <li>• Margate<sup>1</sup></li> <li>• Medley<sup>1</sup></li> <li>• Melbourne</li> <li>• Miami Beach<sup>1</sup></li> <li>• Miami Gardens<sup>1</sup></li> <li>• Miami Lakes<sup>1</sup></li> <li>• Miami Shores<sup>1</sup></li> <li>• Miami Springs<sup>1</sup></li> <li>• Miami<sup>1</sup></li> <li>• Milton</li> <li>• Miramar<sup>1</sup></li> <li>• Mount Dora</li> <li>• New Port Richey</li> <li>• Niceville</li> <li>• North Bay Village<sup>1</sup></li> <li>• North Lauderdale<sup>1</sup></li> <li>• North Miami Beach<sup>1</sup></li> <li>• North Miami<sup>1</sup></li> <li>• North Palm Beach<sup>1</sup></li> <li>• North Redington Beach<sup>1</sup></li> <li>• Oakland Park<sup>1</sup></li> <li>• Oakland<sup>1</sup></li> <li>• Ocala</li> <li>• Ocean Ridge<sup>1</sup></li> <li>• Ocoee<sup>1</sup></li> <li>• Okeechobee</li> <li>• Oldsmar<sup>1</sup></li> <li>• Opa-locka<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Dunedin<sup>1</sup></li> <li>• Eatonville<sup>1</sup></li> <li>• Edgewood<sup>1</sup></li> <li>• El Portal<sup>1</sup></li> <li>• Eustis</li> <li>• Fernandina Beach</li> <li>• Flagler Beach (2010)<sup>2</sup></li> <li>• Florida City<sup>1</sup></li> <li>• Fort Lauderdale<sup>1</sup></li> <li>• Fort Meade (2012)<sup>2</sup></li> <li>• Fort Myers</li> <li>• Fort Myers Beach</li> <li>• Fort Pierce</li> <li>• Fort Walton Beach</li> <li>• Gainesville</li> <li>• Glen Ridge<sup>1</sup></li> <li>• Golden Beach<sup>1</sup></li> <li>• Golf<sup>1</sup></li> <li>• Greenacres<sup>1</sup></li> <li>• Gulf Breeze</li> <li>• Gulf Stream<sup>1</sup></li> <li>• Gulfport<sup>1</sup></li> <li>• Haines City</li> <li>• Hallandale Beach<sup>1</sup></li> <li>• Haverhill<sup>1</sup></li> <li>• Hialeah Gardens<sup>1</sup></li> <li>• Hialeah<sup>1</sup></li> <li>• Highland Beach<sup>1</sup></li> <li>• Hillsboro Beach<sup>1</sup></li> <li>• Holly Hill</li> <li>• Hollywood<sup>1</sup></li> <li>• Holmes Beach (2010)<sup>2</sup></li> <li>• Homestead<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Gardens</li> <li>• Palm Beach Shores<sup>1</sup></li> <li>• Palm Beach<sup>1</sup></li> <li>• Palm Coast (2009)<sup>2</sup></li> <li>• Palm Springs<sup>1</sup></li> <li>• Palmetto</li> <li>• Palmetto Bay<sup>1</sup></li> <li>• Panama City</li> <li>• Parkland<sup>1</sup></li> <li>• Pembroke Park<sup>1</sup></li> <li>• Pembroke Pines<sup>1</sup></li> <li>• Pensacola</li> <li>• Pinecrest<sup>1</sup></li> <li>• Pinellas Park<sup>1</sup></li> <li>• Plant City<sup>1</sup></li> <li>• Plantation<sup>1</sup></li> <li>• Pompano Beach<sup>1</sup></li> <li>• Port Orange</li> <li>• Port St. Lucie</li> <li>• Punta Gorda</li> <li>• Quincy<sup>3</sup></li> <li>• Redington Beach<sup>1</sup></li> <li>• Redington Shores<sup>1</sup></li> <li>• Riviera Beach<sup>1</sup></li> <li>• Rockledge</li> <li>• Royal Palm Beach<sup>1</sup></li> <li>• Safety Harbor<sup>1</sup></li> <li>• Sanford<sup>1</sup></li> <li>• Sarasota</li> <li>• Satellite Beach</li> <li>• Sea Ranch Lakes<sup>1</sup></li> <li>• Sebring<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Juno Beach<sup>1</sup></li> <li>• Jupiter Inlet Colony<sup>1</sup></li> <li>• Jupiter<sup>1</sup></li> <li>• Kenneth City<sup>1</sup></li> <li>• Key Biscayne<sup>1</sup></li> <li>• Key West</li> <li>• Kissimmee</li> <li>• Lake Worth<sup>1</sup></li> <li>• Lakeland</li> <li>• Lantana<sup>1</sup></li> <li>• Largo<sup>1</sup></li> <li>• Lauderdale Lakes<sup>1</sup></li> <li>• Lauderdale-by-the-Sea<sup>1</sup></li> <li>• Lauderhill<sup>1</sup></li> <li>• Lazy Lake<sup>1</sup></li> <li>• Lighthouse Point<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Spring Hill</li> <li>• St. Augustine</li> <li>• St. Augustine Beach</li> <li>• St. Cloud</li> <li>• St. Pete Beach<sup>1</sup></li> <li>• St. Petersburg<sup>1</sup></li> <li>• Tamarac<sup>1</sup></li> <li>• Tampa<sup>1</sup></li> <li>• Tarpon Springs<sup>1</sup></li> <li>• Tavares</li> <li>• Temple Terrace<sup>1</sup></li> <li>• Tequesta<sup>1</sup></li> <li>• Titusville</li> <li>• Treasure Island<sup>1</sup></li> <li>• Venice</li> <li>• Vero Beach</li> <li>• Virginia Gardens<sup>1</sup></li> <li>• Wauchula</li> <li>• Wellington<sup>1</sup></li> <li>• West Melbourne</li> <li>• West Miami<sup>1</sup></li> <li>• West Palm Beach<sup>1</sup></li> <li>• West Park<sup>1</sup></li> <li>• Weston<sup>1</sup></li> <li>• Wilton Manors<sup>1</sup></li> <li>• Windermere<sup>1</sup></li> <li>• Winter Garden<sup>1</sup></li> <li>• Winter Haven</li> <li>• Winter Park<sup>1</sup></li> <li>• Winter Springs<sup>1</sup></li> <li>• Zephyrhills</li> </ul>
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## Dense Urban Land Areas

Urban service areas of a Manatee county



85



**DRI** CHAPTER 4 – Developments of Regional Impact

Section 380.06(29), F.S.

## Non-DULA Local Government Exemptions

### Non-DULA Cities

- Urban infill
- Community redevelopment
- Downtown revitalization
- Urban service area/boundary

### Non-DULA Counties

- Urban infill
- Urban infill and redevelopment
- Urban service area

86



**DRI** CHAPTER 4 – Developments of Regional Impact



## Other DRI Review Exemption

Urban Service Boundary, 163.3177(14), F.S.

Rural Land Stewardship Area, 163.3248, F.S.

Detailed Specific Area Plan, 163.3245, F.S.

Development identified in airport and campus master plans

87



**DRI** CHAPTER 4 – Developments of Regional Impact

## Sector Plans

- Allows large scale CPA at least 15,000 acres to convert to a sector plan and be implemented through detailed specific area plans (DSAPs)
- Allows approved master DRI development order to convert to a sector plan and receive approval through DSAPs
- Previously approved sector plans are governed by the new sector plan provisions

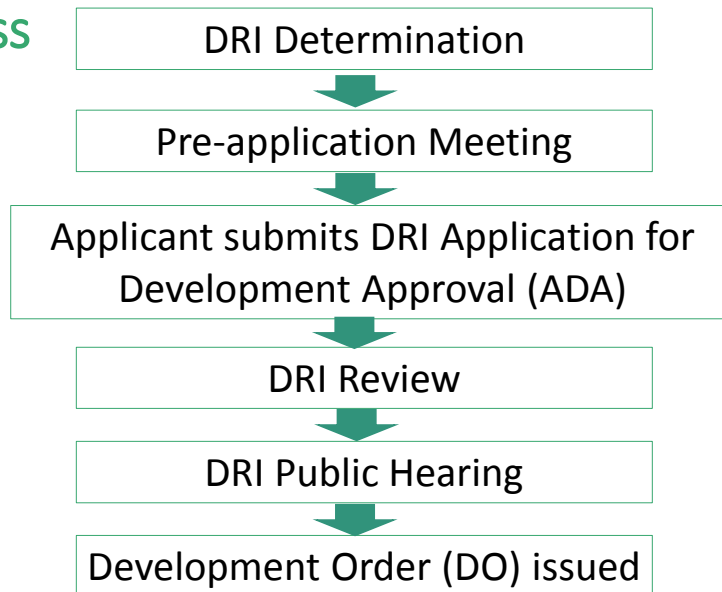
88



**DRI** CHAPTER 4 – Developments of Regional Impact



## DRI Process



89 Typical process cycle time = minimum of 270 days Appendix A review timeframes and responsible agencies



**DRI** CHAPTER 4 – Developments of Regional Impact

## Other Development Review Types

Notice of Proposed Change (NOPC)

Annual/biennial reports

Transportation or traffic monitoring studies

90



**DRI** CHAPTER 4 – Developments of Regional Impact



## Notice of Proposed Change

- Changed build-out times
- Reduction in single-family units, increase in multifamily & retirement units
- Reduction in retail/office space and industrial s.f.

Exhibit 35 (pg. 155) details what changes would be considered a “Substantial Deviation”

Land Use	Phase I 2030 2020 <sup>1</sup>	Phase II 2030 2032	Phase III 2030 2042	Total
Residential				
Single-Family Detached	1,999 <sup>2</sup>	1,740 1,332	1,663 1,181	5,402 4,512
Single-Family Attached	342 <sup>2</sup>	366 727	379 0	1,087 1,089
Multifamily	270 <sup>2</sup>	296 1,250	296 0	862 1,520
Retirement	1,250 <sup>2</sup>	250	0	1,250 1,500
Total Residential	3,861 <sup>2</sup>	2,402 3,559	2,338 1,181	8,601
Retail	146,085 140,131	768,860 190,000	768,860 400,000	1,683,795 730,131
Government Center/Office (s.f.)	45,000 112,320 <sup>3</sup>	334,138 725,000 <sup>3</sup>	700,662 200,000	1,088,800 1,037,320
Medical Office	90,000	110,000	0	200,000
Industrial (s.f.)	100,000	259,500 0	459,500 100,000	819,000 200,000
Community College (Students)	0 <sup>3</sup>	400 0	500 900	900
Golf Course (Holes)	0 <sup>3</sup>	18 0	0	18 0
Hospital (Beds)	0	150	0	150
District Park (Acres)	80			80
Residential-Treatment-&-Care-Facility, Assisted Living Facility / Nursing Home (Beds)	50	0 50	0	50 100

Source: [DRI # 233, Pasco County \(Connerton\)](#)



## Celebration, FL Traffic Monitoring & Modeling Study

- Traffic was monitored to determine internal capture, peak hour trips and daily trips
- It was then compared with ITE trip generation rates

Data was collected for the Celebration M&M during 72-hour machine cordon line counts. These counts revealed a significant difference from the internal trip values predicted by the ITE Trip Generation Handbook 6<sup>th</sup> Edition. This difference was evident in both the peak hour and daily trips and created significant internal capture percentages.

- Total Peak Hour Project Trips (actual counts): 3,458
- Total Peak Hour Project Trips (ITE, 6<sup>th</sup> Edition): 5,044
- Total Daily Project Trips (actual counts): 40,912
- Total Daily Project Trips (ITE, 6<sup>th</sup> Edition): 56,544
- Calculated Peak Hour Internal Capture: 31.8%
- Calculated Daily Internal Capture: 27.7%

Source: [FL ITE Brief 2005](#)





# DRI Checklists

## DRI Pre-Application Checklist

1 of 3

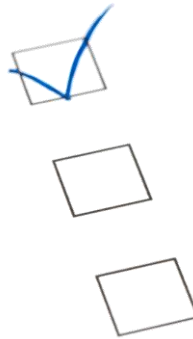
Information to be Provided to Applicant	
Area Specific	
A. Recommended transportation site impact methodologies used and/or required by the Department including:	<ol style="list-style-type: none"> <li>1. Software programs</li> <li>2. Traffic modeling techniques</li> <li>3. Trip generation methodologies</li> <li>4. Other software may be used if agreed to be all parties</li> </ol>
Information on:	<ol style="list-style-type: none"> <li>1. Relevant existing or proposed rights-of-way,</li> <li>2. Proposed or current Major Investment Studies (in urbanized areas</li> <li>3. SIS action or master plans</li> <li>4. Any corridors designated in the Florida Transportation Plan within the study area</li> </ol>
Work Program	1. How information regarding facilities programmed for improvement in the first three years of the Department's Five-Year Adopted Work Program may be obtained.
LGCP	1. Local Government Comprehensive Plans (LGCP) ( <i>as applicable</i> )
L RTP	1. MPO Long Range Transportation Plan (LRTP) ( <i>as applicable</i> )
Transit Development Plan	( <i>as applicable</i> )

93



## DRI CHAPTER 4 – Developments of Regional Impact

# Poll



WHO CURRENTLY HAS AN ACTIVE  
DRI IN THEIR AREA?

94





## Chapter 5 Mitigation



95



CHAPTER 5 – Mitigation

### Role of the Department

Expedited

State coordinated  
reviews



Identify impacts and mitigation measures

Remaining statutory provisions regarding the process for mitigation  
Sections 163.3177(6)(b) and 163.3180(5)(h)1., F.S.

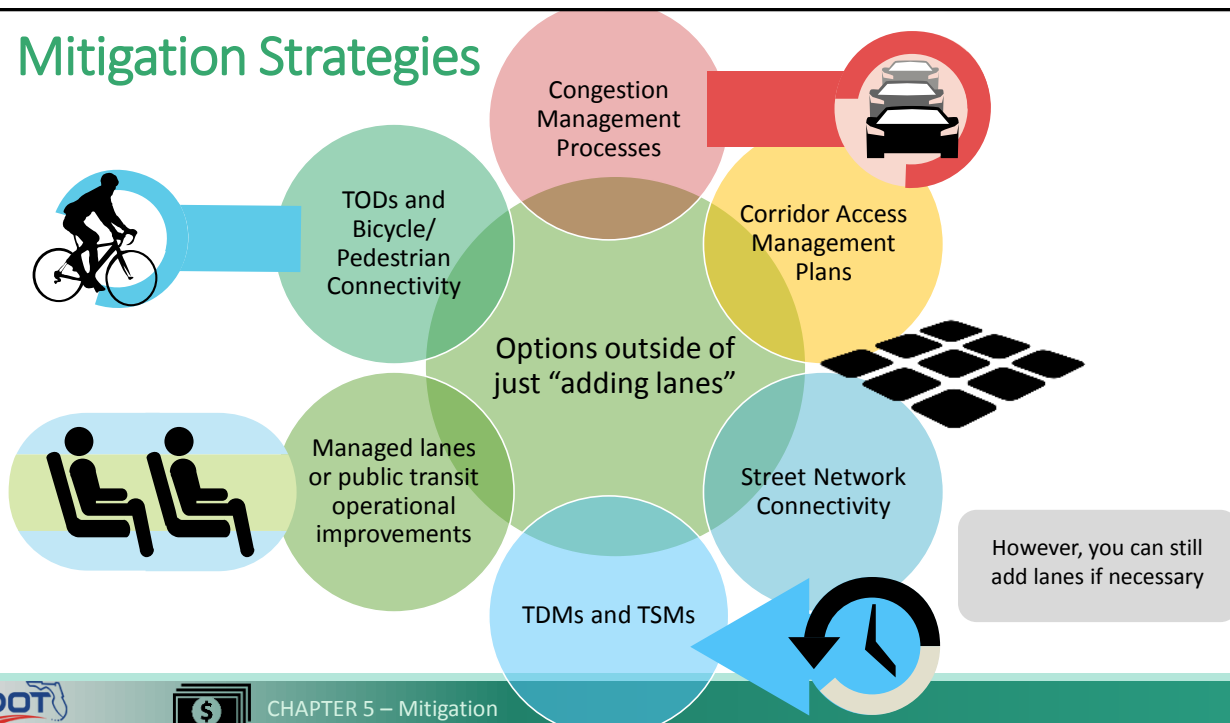
96



CHAPTER 5 – Mitigation



## Mitigation Strategies

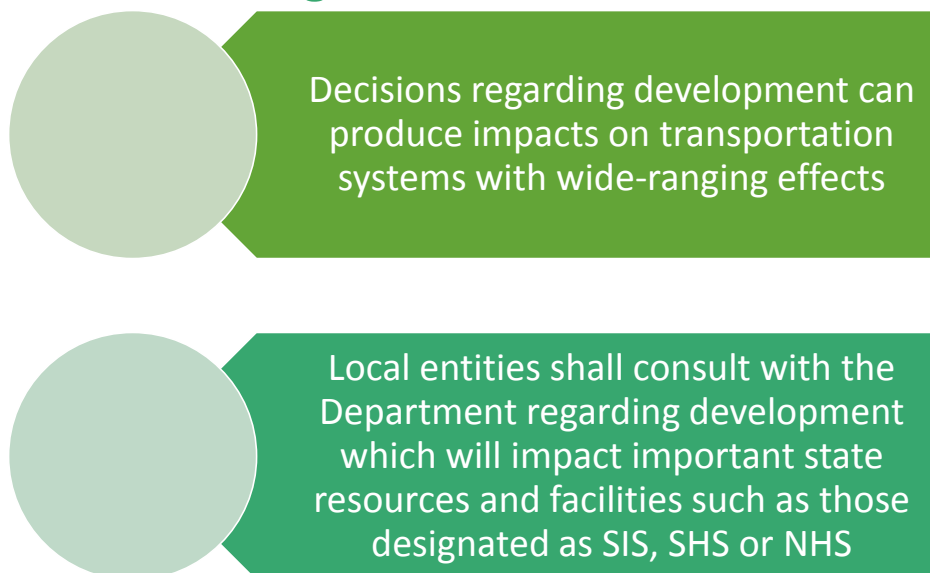


97



CHAPTER 5 – Mitigation

## Significance of Mitigation



98



CHAPTER 5 – Mitigation



## Changes Since 2010 Update Affecting Mitigation

Repeal of proportionate fair-share mitigation provisions



Revisions to regulations regarding proportionate share mitigation



Requirement for local entities to consult FDOT on impacts to SIS facilities



99



CHAPTER 5 – Mitigation

## Changes Since 2010 Update Affecting Mitigation

New definition for “transportation deficiency”

“Transportation deficiency” means an identified need where the existing and projected extent of traffic volume exceeds the level of service standard adopted in a local government comprehensive plan for a transportation facility.

100



CHAPTER 5 – Mitigation



## Proportionate Share Mitigation

Existing Proportionate Share Agreements

Local governments must allow the option of proportionate share mitigation

102



CHAPTER 5 – Mitigation

## Mobility Fee Mitigation

Alternative to traditional concurrency

Connection to proportionate share



Examples: Alachua and Pasco Counties

104



CHAPTER 5 – Mitigation



# Pasco County Mobility Plan

## Market Area Characteristics/Objectives:

### West Area:

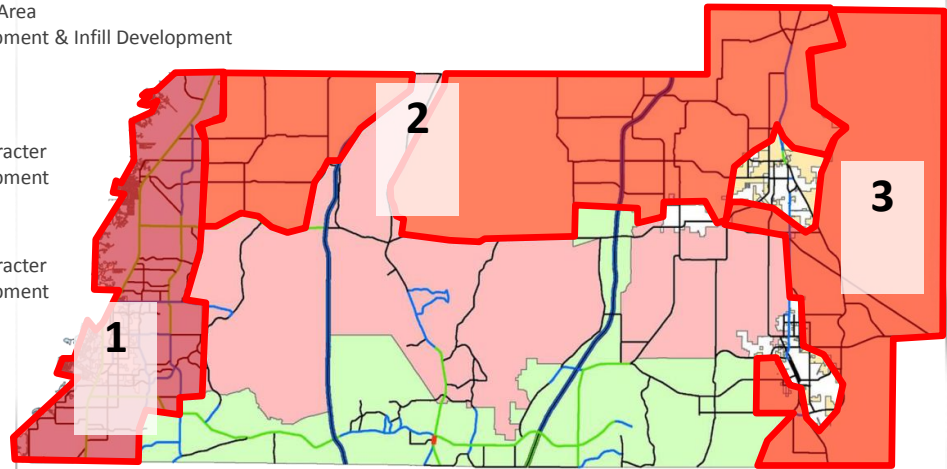
- Existing Urbanized Area
- Promote Redevelopment & Infill Development
- Higher Density

### North Area:

- Rural Area
- Preserve Rural Character
- Discourage Development

### East Area:

- Rural Area
- Preserve Rural Character
- Discourage Development



108



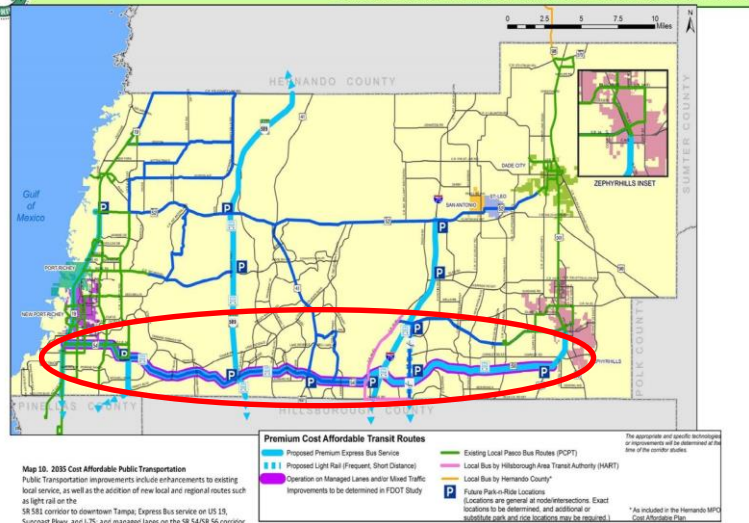
CHAPTER 5 – Mitigation

# Pasco County MPO 2035 LRTP



PASCO COUNTY MPO | 2035 Long Range Transportation Plan | Summary Report | February 2010

2035 Cost Affordable Plan: Public Transportation, Premium Route Improvements



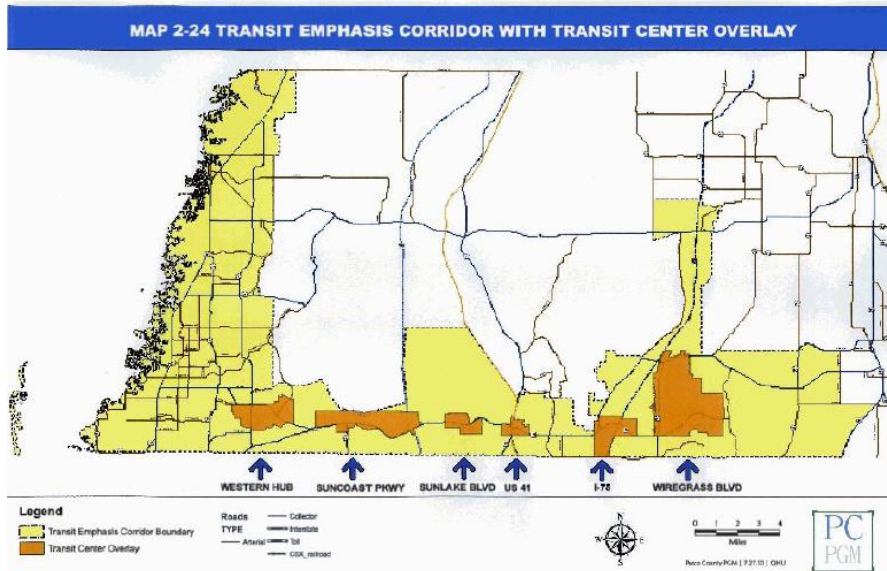
109



CHAPTER 5 – Mitigation



# Pasco County Transit Corridor



110



CHAPTER 5 – Mitigation

## More Multi-Modal Guidance



Multimodal Transportation Best Practices and Model Element



Mobility Review Guide



Supporting Plans and Guidelines - SP -	State, Regional, Local - SP1 -	SP1.1	Supports the Florida Transportation Plan, the Strategic Intermodal System Plan, and other applicable state plans and guidelines.	
		SP1.2	Consistent with adopted regional mobility plan or vision, such as that established through a regional collaborative, including the MPO Long Range Transportation Plan and adopted Transit Development Plan (TDP).	
		SP1.3	Coordinates with transportation, corridor management, and mobility plans of adjacent local governments and transportation planning agencies.	
		SP1.4	Consistent with local government comprehensive plan objectives and policies as well as specialized plans.	
Organization & Location - ME1 -	Organization & Location - ME1 -	ME1.1	Designates and reinforces strong urban core(s) and urban activity centers of varying sizes and compositions.	
		ME1.2	Transit-compatible land uses are defined and required to locate on existing or planned transit corridors with direct access to transit. This should include but is not limited to transit-oriented developments (TOD).	
		ME1.3	Ensures that industrial and other freight-related uses locate in proximity to and have direct access to major transportation routes and intermodal stations or other freight	

111

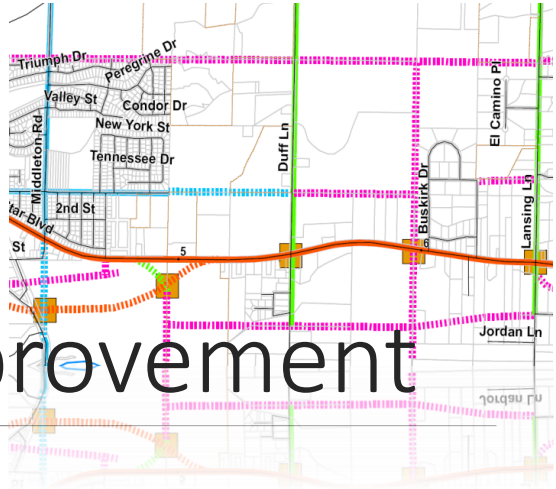


CHAPTER 2 – Transportation Impact Process



# Network Improvement

CATEGORY:

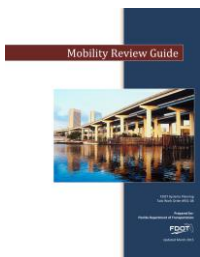


112



CHAPTER 5 – Mitigation

## Network Improvement Key Elements



Major  
Roadway  
Network



Local  
Roadway  
Network



Transit  
Network



Bicycle  
and  
Pedestrian  
Network

← Complete gaps and increase connections →

113

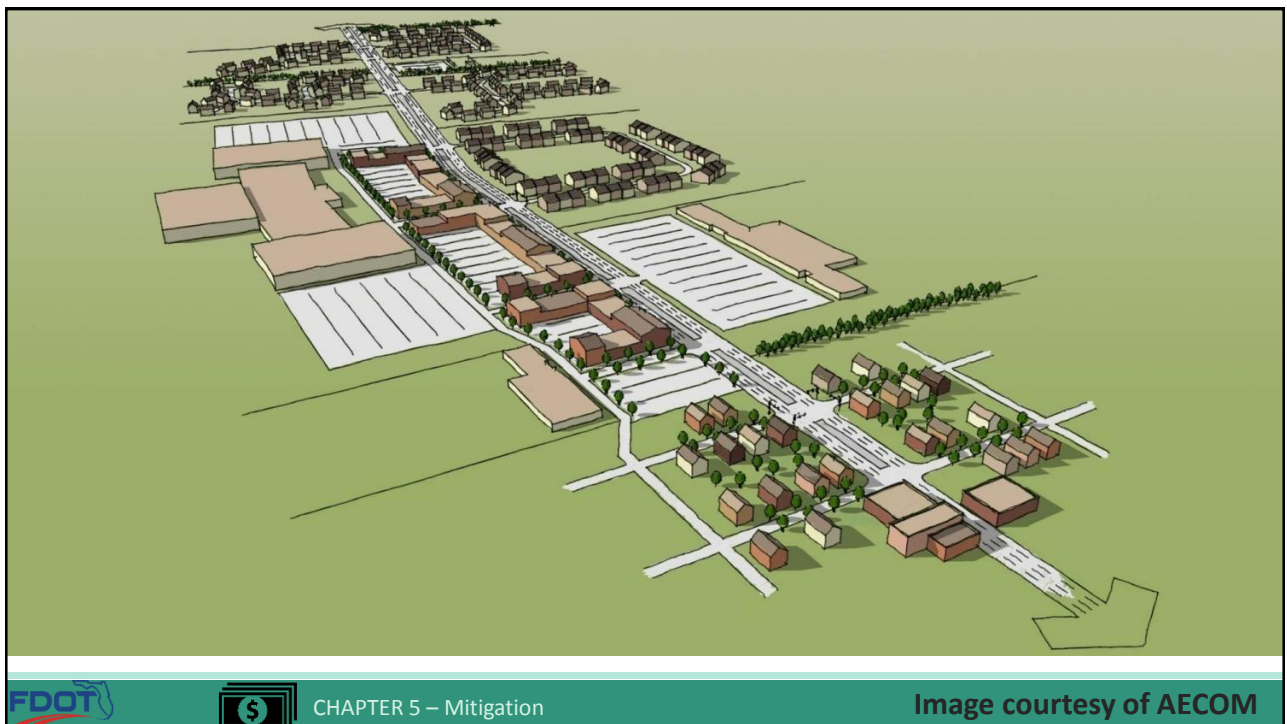
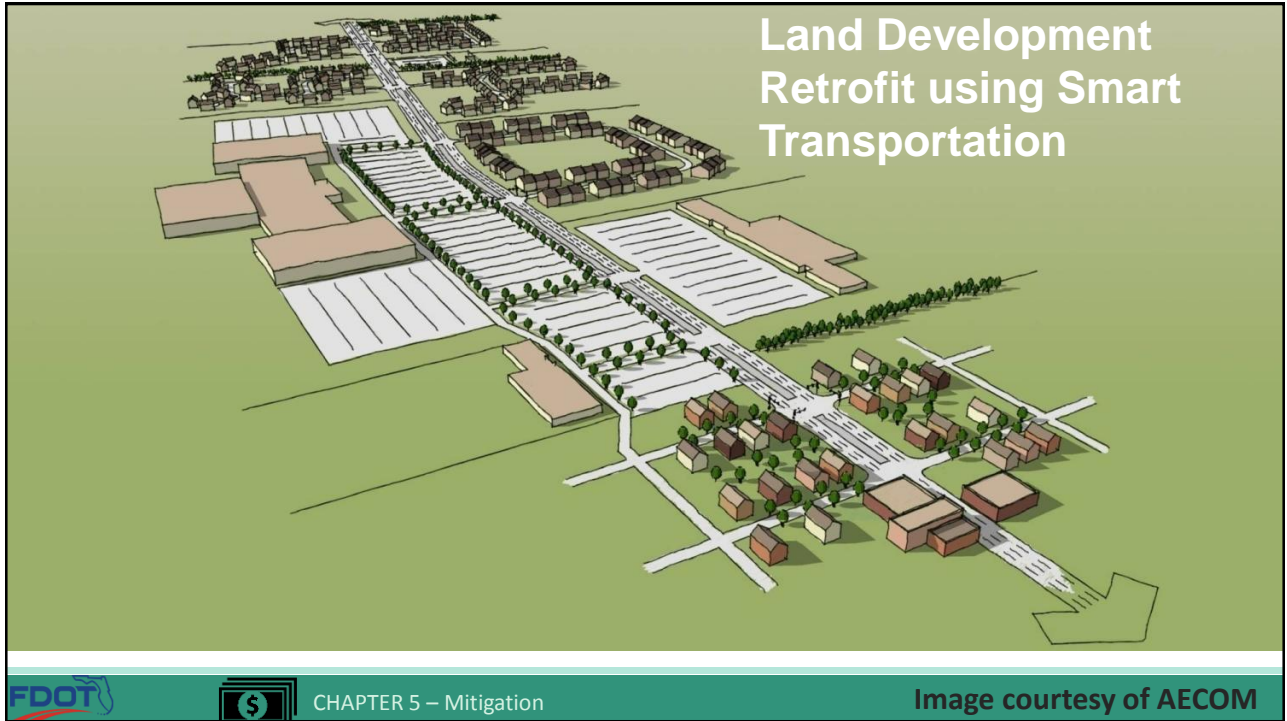


CHAPTER 5 – Mitigation













## CHAPTER 5 – Mitigation

Image courtesy of AECOM

## Future Webinar Sessions

2:30- 4:00 PM

Session 2 – May 21<sup>st</sup>, 2015

### Transportation Impact Process

Trip Generation of the New Development

Trip Distribution

Future Conditions Analysis

Session 3 – June 25<sup>th</sup>, 2015

### Transportation Impact Process

(Continued)

Session 4 – July 23<sup>rd</sup>, 2015

### LGCP Reviews &

### Developments of Regional Impact

Comprehensive Plan Amendment Process

Various Elements

Development of Regional Impact Review Process  
Requirements

Checklists

Session 5 – August 20<sup>th</sup>, 2015

### Mitigation

Strategies to Consider

Funding Enhanced Mobility



**Andrew  
Young**

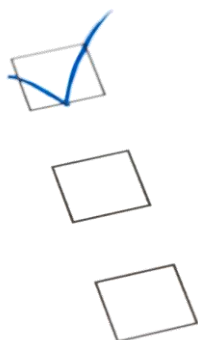
121



Future Live Training



# Poll



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ARE YOU SIGNED UP IN THE FDOT  
CONTACT MANAGER?

122



# Questions?

123





# Thanks!



124

